# Practical Shoe Repairing

By

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## TOOLS THAT ARE NECESSARY

- 1. One Stand and Five Straight Lasts.
- 2. One Long Rasp.
- 3. One Lip Knife.
- 4. One Strong Screw-driver to pry Heels, etc.
- 5. One Peg Awl.
- 6. Three Sewing Awls.
- 7. One Welt Knife.
- 8. One Square Point Skiving Knife.
- 9. Two Hammers, Light and Heavy.
- 10. One Knife Sharpener.
- 11. One Pair Nippers.
- 12. One Common Pair of Pinchers.
- 13. One Nail Set.
- 14. Small and Large Stretchers.
- 15. One Hand Channel.
- 16. Foot or Power Sandpaper or Finishing-Wheels and Brushes.

# Care Of The Shoeshop

any other shop Like any other shop should be kept clean at all times with every thing in its place and a place for everything. A man does not only accomplish more work in a well arranged shop but helps

to secure the confidence of the prospective customer, as well.

A man entering your shop for the first time usually gives it the once over; if it appears tidy he will have confidence that he will receive neat work. Too much attention can not be given to the care of your shop.

## Wax Ends.

Today time is too valuable to sit down and make Wax Ends like the cobblers did fifty years ago. Therefore all reliable Finding Houses carry Wax Ends that are measured out and the flax broken by machinery. They cost but a few cents and all that is left to do to complete the Wax End is to separate the ends of the threads in half. Lay them on your knee about one inch apart, moisten the palm of your hand a very little place it on the two ends bearing down and roll them toward you, still bearing down roll them away from you till they meet twist and form one point.

Then do the same with the other end and wax the whole well by rolling the threads from end to end. Take your bristle and split it from the lower end as far as it will split easily. Take one end of the Wax End and place it between the split as far as it will go. Now roll it close together around the split ends of the bristle.

Make a small hole in Wax End close to end of bristle, pull bristle through hole so that the cords will hold together firmly. Wax connecting parts till the end will stand out stiff.

# Plain Hand Stitching

Put the awl through the leather from the outside or right side, then put the left hand bristle through, then the right hand bristle Take hold of bristles and pull them through enough so you can take hold of the ends below the bristles and finish the stitch making it good and tight. Always sew toward you.

## Bottom of Shoe

The bottom of a shoe is divided into four parts. The Heel, Shank, Ball, and Toe. The back of heel is called the sweep, the end closest to the shank is the breast of the heel, the bottom lift of the heel is called the top lift. The bottom of the shoe including the ball and toe is the sole. The sole between the bottom

sole and welt is the middle or slip sole.

The welt is the ribbon like strip of leather sewed around the bottom of the upper and inner sole to hold the sole. This type of shoe is called the welt shoe. Where the upper is lasted onto the inner sole without any welt the shoe is usually called a McKay or Standard Screw Shoe.

The difference in makes can be distinguished easily after one has practiced on a couple of pairs of the different makes.

# Preparation of the Sole Leather.

Sole leather will give more wear if it is prepared right. The first thing to do is to put the leather in water and soak it until it is wet through. Then take the leather and stand it on edge so all the water will drain out; let it set about twelve hours. Keep a damp cloth over it so it does not get too dry to work easily. Leather in this condition cuts very easily; so being the leather is better to work the work will always be better.

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# A Cement Patch On The Upper

Take the shoe to be patched and tighten it on a stretcher cut a patch the size you want; skive the flesh edge of the patch all around. Set the patch on shoe draw a line around it take off patch and skive and sandpaper shoe set patch on again to see that it fits smooth. Take off the patch again and cement both the patch and shoe with leather cement.

Let the cement dry until it turns white, then warm the patch and shoe over small flame. Now press the patch on firmly and smooth it down until it looks neat.

# Rips or Broken Seams On the Upper.

If a seam is broken apart on the upper of the shoe cement both parts with rubber cement. Let dry and press them together, being careful to get the parts back in their original position. Put on Patch Machine and sew, using about ten stitches to the inch. Where the back seam is broken apart sew a double row

of stitches. A double row of stitches should be used on the vamp and toe cap seams. Always take the laces out of a shoe before trying to sew in a tongue that has been torn loose.

Sewed patches should always be put between the lining and upper of shoe if possible.

# Counter Linings

The repairman should use a very soft durable heel lining such as chamois skin for repair work. This kind of lining will give satisfaction and at the same time enable him to do faster work thus making more profit. A lining of this kind will stay in place without being sewed. Give the lining a generous coat of rubber cement, do the same to the counter of shoe where lining fits. Set aside till both parts are about half dry then press lining in place and let it stand till completely dry.

# Oiling the Uppers

This item appears small but is very important. The shoes should be thoroughly dry before oil is put on. I have found Castor Oil very good for either dress or work shoes. It can be rubbed in very easily and if this oil is put on in the evening shoes can be polished next morning.

Rats or mice will not molest shoes in store that have been treated with Castor Oil.

# Sharpening Knives

A dry sandstone should be used. Hold the knife firmly giving it a quick even stroke from end to end. Have it lay almost flat on the stone otherwise you will have a thick blade coming to an edge all at once. This kind of blade cuts hard and must be sharpened every time it is used. When cutting rubber or composition soles dip the blade in water and pull through the sole from end to end. Do not push knife through the sole as this some times loos-

ens the soles from the welt if the cement is not holding right. Also dip the knife in water when cutting rubber heels.

## Lifts on Wooden Heels.

Take the remaining part of lift off of the wooden heel and see that the covering of the heel is well lasted down on the heel. The covering is usually satin; celluloid; or leather. Now take a lift, lay it on the heel and put a five-eights eighteen guage brad in the center of the lift and one in each of the corners; then trim the lift at an outside angle, three more brads around the lift will be enough; as it is very important never to split a wooden heel. To avoid splitting the wooden heel never use any type of nail but a brad. Never try to put a rubber heel on a wooden heel; always use the panco composition in the ten iron thickness. Cement this type of heel first and then nail it with five-eights brads; dip your knife in water

when cutting Panco composition. The Panco composition is the longest wearing material known for French heels.

# Upper Ripped from Welt

When the upper is ripped loose from welt and the sole is still good, moisten the part of upper to be worked. Sew a row of stitches along the edge of upper. Channel the sole the distance the upper has broken loose, take heavy Wax End with bristle on one end only Knot one end and sew through channel in the sole leaving the knot on the welt side. Sew back through sole again locking end through stitch in the upper doing this over and over again until the upper is locked tight to the welt. Be careful not to wrinkle the upper. Cut off knot laying on welt. Always sew toward you. Channel: the channel is a coarse, furrow, groove, or cut.

# Putting a Patch on Sole

Putting a patch on a sole is very profitable if you are fast and accurate. If you figure on steady customers never nail a patch on a sole if you can help it; as this interferes with work on the shoe at some future time. The part of the sole that needs patch should be marked off with chalk to the most suitable shape to receive patch (using your own judgment).

Then rasp; skive; or grind this part concave or at angle to receive patch. Cut sole leather patch to fit; rasp flesh side of patch until it fits level with the sole. Apply the leather cement to the prepared part of sole and patch; let the cement dry until white, then hold both parts over small flame until cement softens again then press firmly together and give it quick light taps with hammer.

## Underneath Sole Patch

Very often a customer will ask to have a patch put underneath the sole instead of on

the top.

This job is very simple. All that is necessary to do is to cut out the size patch you need; then start from the edge of the patch that is to be exposed around the edge of the welt and skive it down gradually making it look like a half-round wedge. Put a knife between the old sole and the welt and cut the stitches away in the place the patch is to slip under. Slip patch under and put a couple six-eights bulldog nails through the sole and patch to hold the patch in place while you trim it off around the welt. Then pull the nails out and draw your pattern line around the edge of sole for nailing. Nail the patch in place using six eights bull dog nails nailing through the outer sole patch and inner sole, letting the nails clinch on the last. Cut off all the nails that extend out of sole. Hammer the nails down to the last again. Then finish and polish.

# Cement Sole On Hand Turned Shoe

Owing to the price of hand turned sole work, there is only about one person out of twenty that will pay the price for a hand turned sole. Of course the best way to do the job is to turn the sole, but the next best way is to put on a cement sole. Use very light flexible close grained soles. Rasp the flesh side of the soles then level off the soles on the shoes using the sandpaper wheels being careful not to cut the old stitches in the soles. Give the shoes and soles a generous coat of leather cement. Let the cement dry then hold the soles and shoes over small flame and press them firmly together; trim the soles and then put four or five channel nails in the shank and three around the toe. Take the shoes to the finisher and put extra pains in finishing this type of a job.

# Repairing Heels

After a customer leaves a pair of shoes to have the heels repaired the first thing to do is to notice which side the heels are worn the Take the height of the heel at the breast, (which is the end of the heel closest to the sole). This part of the heel is usually worn very little and it gives the original height of the heel. Then take off the amount of layers off of each heel that is worn. Cut off the nails that extend out of each heel. Hammer the nails in the remaining part of the heel in case they were loosened from the inner sole. Take the heel lifts and start to build the heel. If two lifts are all that is required to make the heel the original height, the first lift only needs a couple of nails to hold it in place. Then trim it with a knife to the size of the heel. Put on the top lift and put a nail in the center of the lift and one in each corner of the breast of the heel far enough from the edge to allow for trimming. Trim the top lift even with the one

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below it and put a nail in the center of the sweep of the heel, which is the end of the heel closest to the back seam of the upper. Two more nails will be enough for the inside of the heels as it was the outside that was worn down. Use your own judgment on the amount of nails put on the outside of the heel. If it is a work shoe I put two rows, and a dress shoe one row. Put them as close together as the texture of the leather will stand. Do the same with the other heel, then measure them to see they are the same height. Stand them on a table to see they are level and straight with the sole. Sometimes you will have to bend the shank slightly to make the shoe stand level. This is caused from hammering the heel on the last.

When you find the shoes stand straight and

level your heels are built right. Finish and polish them and your heel job is complete.

When putting on a rubber heel the worn lifts should be taken off the same as on the leather heel; take off the same amount of leather as the thickness of the rubber heel you are putting on; be sure to cement all rubber heels with rubber cement before attaching.



# Nailing On Halfsoles

Take pattern paper, usually magazine paper is the best. Lay it on the sole having the outside distance of the pattern about two inches from the breast of the heel and the inside distance of the pattern about two and a quarter inches distance from the heel; hold pattern firmly and cut it off around the edge of the sole with fine part of rasp. Then cut off the old sole starting about where the shoe bends. Hold your knife at a very slight angle toward the outside sole. If held at this angle you will never cut the welt inseam or slip sole. Continue cutting off the sole until you come to where you started from. Take hold of the old sole with the left hand, hold it up and twist it slightly toward you and cut it off. You will now have enough old sole leather between the length of the pattern and the cut to make the joint. Now take paper pattern and cut out the soles. Lay pattern on the grain side of the bend and draw a pencil mark around it about

Now turn pattern over and mark out the second sole. Skive off the soles at the joint ends starting about five-eights of an inch from the end of the sole. Don't skive it too thin but leave enough thickness of the grain to make a secure joint. Always skive on the flesh side of leather. Now go back to the shoe and cut the joint. Lay the half sole on the shoe, scratch off the shank where the joint is to start.

Cut the joint by cutting off some of the leather on one side of the joint and then cut off some on the other side of the joint. This leaves a hump in the center of the joint which cuts easily. Now lay the sole on the joint and see that the joint is about the same thickness as the sole, as the after grinding of the joint on the grain side of the leather weakens it materially. Then nail your joint. Don't put the nails too close together and see that the sole fits all around the shoe. Now take a piece of coarse sandpaper or a rasp and rasp off welt

edge of shoes and soles. Give the shoes and soles a generous coating of rubber cement. Let the cement dry; then press the sole to the shoe seeing that the sole of shoe stands out straight and flat. Take pinchers and press the welt or slip sole to the sole all the way around the sole. Now trim off the sole even with the welt or slip sole; now put the shoe back on the last; take your knife and scratch pattern line around the edge of the sole about one eighth of an inch from the edge. Now take the peg awl and peg pattern holes around the pattern line about three-eights of an inch apart. Now nail, using bull dog nails if it is a welt shoe; or holdfast nails if it is a McKay or standard screw shoe. Slant the nails slightly towards the center of the sole; as you must never nail the sole to the upper or welt of the shoe. This would spoil the shoe. Always put your hand in the shoe and see that the nails are all well

clinched and that the inner sole lays flat and even. Stand the shoe up. If the sole lays flat and straight the job is O. K. Finish off the sole on your sandpaper wheels giving the shank corners of the joint an oval effect.

## Half soles Sewed

Cut your paper pattern the same as for the nailed sole—also cut out the new soles and joint the same. Then pick out the old stitches in the welt, seeing that all the welt is good and tight. If any part of the welt is weak it should be replaced or resewed. Then cement the soles and shoes the same as for nailing. When dry press the welt to the soles firmly all around the shoe. Trim off sole even with the welt and take hand channel tool (as the knife for this purpose was given up long ago) and make a channel around the shoe just about under the old awl holes in the welt. See that the channel is deep enough to bury the stitches. The sole is now prepared for the curved needle stitcher machine. If sewed by hand set your ---25---

shoe with the heel of it away from you. Take a six or seven cord wax end and start to sew at the joint. Sew toward you and push the awl through the sole into the old holes in the welt (providing the factory machine stitches were not too close together). If such is the case skip a hole each stitch; see that your awl is not too large as the threads should be good and tight in the awl holes. Don't pull the right hand thread hard enough to pull the lock of the thread out on the welt. If the awl is sharp and pushes through hard jab it in a piece of resin soap.

Always put bristle of wax end through the welt first—then follow the other end through sole and pull both bristle ends through far

enough so you can finish the stitch by pulling on the wax ends a few inches beyond the bristle. After the sewing is complete rub down channel or groove and finish on the sandpaper wheels. Be careful not to trim off the welt as this makes the shoe hard to repair the next time it is brought into your shop. Then put on finishing ink and buff and polish.



# Finishing

Although some men insist on it. However this type of worker never gets very far financially. To accomplish anything worth while the finishing must be done on a finishing shaft consisting of different shaped sand wheels; buffing and brush wheels. Nothing set in writing could enable you to learn how to do finishing. However it is easily learned with practice. If you use your eyes and are awake to the fact that each sole or heel must be shaped the same. I might suggest never to sandpaper too much welt when finishing sole and to sand round edges on the joint of a half sole instead of the square edge commonly used.

# Toecaps.

Now we have something that takes a considerable amount of practice. How you put a new toecap on a shoe depends on what type of shoe you are to put it on. We will take a Mc-Kay or standard screw shoe first. If the shoe is not to be resoled loosen the sole back about half ways pull the sole back to the shank and put a tack in it to keep it out of the way. Take a sharp pointed knife and cut the toecap seams to remove the cap. Use the old cap for a pattern as it is never damaged around the edge; cut out your new caps out of a heavy piece of upper leather. Cement the toes of the shoes also the flesh side of the new caps with rubber cement. Let the parts dry. Take the new cap and start to press it to the toe of the shoe where the old seams were cut. As you keep pressing it on towards the tip be careful you are getting it on straight so you won't have to pull it off again. When you have it pressed down on the toe as far as the tip, last both welt side ends

of the cap under the shoe with one tack in each side. Then last the tip end under with one tack. Make cuts in the remaining loose parts of the cap so the cap can be pulled under easily without making any wrinkles on the edge of the cap. After it is lasted under well and tacked, nail the sole back in place. Place stretcher well up in the toe and tap the toe cap all around making it as shapely as possible.

Now we have the welt shoe to recap. I have made some study on this job and have a simple way that is all my own; it is easier than the ordinary way as you do not have to take off the old welt around the toe of the shoe and then sew it back on again. My way is as follows: Take a paper pattern and lay it over the toe and down to the sole. Trim the pattern off around the bottom of the sole. Then cut out the toecap not using very heavy leather, take the shoe to the finisher and sandpaper the old toecap all over, seeing that the cap seams are ground down level with the vamp. Stab a hole thru the sole and welt close to the upper on

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each side of the shoe about half an inch from the old cap seams towards the heel. Give the cap and shoe a generous coat of leather cement (including the welt around the toe). When dry, punch holes in vamp seam end of cap the same as they were in the old cap; now take about one foot of small guage copper wire and twist a shoe button on one end of it; pull the wire thru one of the holes in the sole. Then warm the shoe and cap over small flame and press the cap down over toe of the shoe and flat down on the welt. Take the wire and pull it around the cap, drawing the cap in towards the inseam as much as possible. Put the other end of the wire thru the remaining hole in the sole and fasten the end. Now the cap is lasted and cemented; trim the cap off around the welt, then trim the leather laying on the welt down to a feather edge. Then sew the cap down to the welt either on the sole stitcher or by hand; take wire off of the shoe and let the shoe stand a couple of hours before applying the finishing ink.

# Repairing Ripped Shank.

When repairing a shank where the stitches are ripped away from the welt, first see if the shoe is in fairly good condition or if it is nearly worn out. If the latter is the case it is not necessary to sew it in place. Simply make a channel about an eighth of an inch from the edge. Nail it down with channel nails. Cement channel with leather cement. Rub channel with the handle of your hammer, smoothing it off so the nails do not show. If the shoe is worth future repair, prepare channel as before mentioned. Take wax end, sew down shank with plain stitch, then cement it and rub it off with the handle of your hammer.

# Stock And Advertising.

From my own experience I have found that the best and cheapest way to advertise a shoe repair shop is to do neat work and use the best stock. If you use this system you will be hireing men when your competitor with the cheap

stock and cheap prices finds it hard to keep himself busy. Of course you must practice to do neat work, as a set of lessons on paper can only help you along. But you cannot go wrong by using the following stock in your shop: For men's work use the U. S. Leather Company's 1-3 pound Clear Neport Bends. For ladies' work use 10 pound L and M Clear Bends. For composition soles use the Panco Products. For top lifts use HHH Monarch Lifts.













